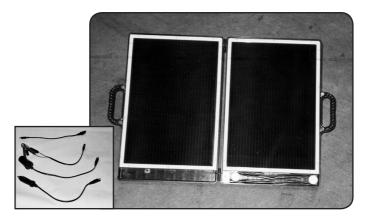
# CHICAGO POWER SYSTEMS

# **SOLAR CHARGER 12V-18V**

**Model 95000** 

## **ASSEMBLY AND OPERATION INSTRUCTIONS**



Due to continuing improvements, actual product may differ slightly from the product described herein.



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# TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USE.

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For technical questions or replacement parts, please call 1-800-444-3353.

#### **SPECIFICATIONS**

Features	Solar Panels in a Portable Folding Design For Charging 12V through 18V Batteries, Charging Indicator LED, Blocking Diode to Prevent Draining, Four Different Adaptors
Overall Dimensions	26 1/2" L X 20 1/2" W x 3/4" T (open position)
Output	400 mA Maximum ~24 V Direct Sunlight, ~17.5 V Indirect Sunlight
Power Cord	10 ft. Length, Two Way Insulated Plug
Weight	9.7 lb.

# **Save This Manual**

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Write the product's serial number in the back of the manual near the assembly diagram, or write month and year of purchase if product has no number. Keep this manual and invoice in a safe and dry place for future reference.

# **GENERAL SAFETY RULES**

#### **↑**WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

SAVE THESE INSTRUCTIONS

- 1. Keep your work area clean and well lit. Cluttered areas invite accidents.
- Keep bystanders, children, and visitors away while operating this product. This product is not a toy.
- Stay alert. Watch what you are doing, and use common sense when operating this product. Do not set up this product while tired or under the influence of drugs, alcohol, or medication.
- 4. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of this product in unexpected situations.
- Use the correct charger for your application. Do not use the charger for a purpose for which it is not intended.
- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one charger may become hazardous when used on another charger.

- Charger service must be performed only by qualified repair personnel. Service
  or maintenance performed by unqualified personnel could result in a risk of injury.
- 8. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of property damage or injury.
- 9. **Maintain labels and nameplates on the charger.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- Maintain a safe working environment. Do not use this product in a damp or wet location.
- 11. Follow all safety precautions provided with the battery you will charge. Lead-acid batteries are especially dangerous and caution must be exercised.
  - a. Lead-acid batteries generate hydrogen gas during normal operation, and even more gas is generated when the battery is charging. Hydrogen gas is explosive and highly flammable. Never smoke near a charging battery.
  - b. Do not attempt to start a vehicle with Charger connected to its battery.
  - c. If battery acid comes in contact with skin, wash with soap and water and apply water and baking soda to the site. If the fluid comes into contact with eyes, flush with water for several minutes and contact a physician immediately.
  - d. Do not attempt to charge a leaking battery.

# **CAUTION: To Prevent Property Damage**

- The Solar Charger is fragile. Be careful, after opening up and positioning the support legs, that the Solar Charger is on a level surface and will not fall over.
- Keep the Solar Charger free of dirt, dust and grime. Dust covering the Solar Charger will block out sunlight causing a decrease or stoppage of efficiency in recharging the batteries.
- 3. Only use this Charger with charging bases from Harbor Freight Tools that accept a 5.5 x 2.1 mm plug and are from 12 V 18 V. Do not use on another brand, another voltage, or a charging base designed for a different plug.
- 4. Do not hook up more than one solar charger in series.
- 5. Do not short circuit the positive to the negative.

# **UNPACKING**

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

### **OPERATION**

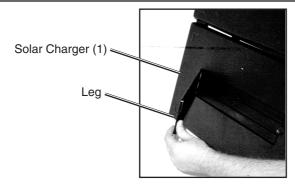


Figure 1

- 1. Unfold the Solar Charger. Open the "support legs" on the backs. See Figure 1.
- 2. Place the Charger in a position that can receives direct sunlight without shade. Turn the Solar Charger toward the sun. The blue LED will go on (or flash) whenever the Solar Charger is generating electricity. A blocking Diode in the Solar Charger helps to ensure that it will not drain your battery. If the weather is cloudy or if the charger is even partially shaded, the output will be drastically reduced.

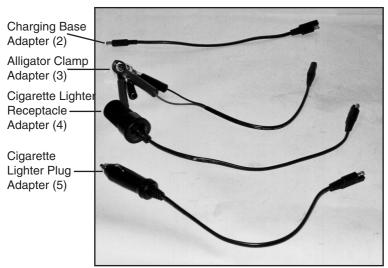


Figure 2

- 3. Identify the Adapter charger connection you need. See Figure 2.
- 4. Plug the adaptor to the Power Cord on the Solar Charger.
- 5. Connect the correct Adapter (2 through 5) to the device you are powering.

6. See below for charging function instructions:

#### 2) Charging Base Adapter:

Refer to the manual that comes with the charging base. The charging time will be altered substantially—the Solar Charger must receive at least four hours direct sunlight to fully charge a battery. Different batteries will have different capacities and may require different charging times. Periodically check on the charger.

#### 3) Alligator Clamp Adapter:

Connect cables to the 12V lead-acid car battery in a well-ventilated area outside the vehicle. Periodically remove the cables and check the battery's voltage. Once the battery's voltage reaches 13-1/2 V it is completely charged.

#### 4) Cigarette Lighter Receptacle Adapter:

This item can be used to power certain accessories that use 12 V nominal input from a cigarette lighter-style plug. Do not use this item to power sensitive electronics.

#### 5) Cigarette Lighter Plug Adapter:

This item can be used to provide a trickle or maintenance charge to a car's battery through the car's cigarette lighter receptacle. The vehicle's ignition may need to be in the accessory position to permit the connection.

7. Disconnect charger, fold, and store after use.

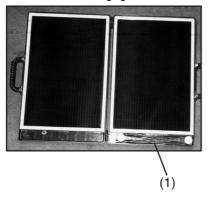
# INSPECTION, MAINTENANCE, AND CLEANING

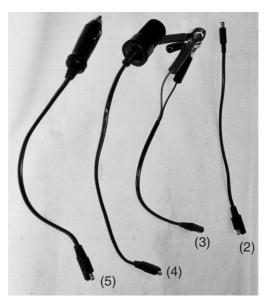
- 1. **AWARNING! BEFORE EACH USE**, inspect the general condition of the tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
- Disposing of solar panels should comply with the standards for waste disposal in your community. Contact your local city government office for the nearest waste disposal area in your community.

### **PARTS LIST**

Part	Description	Q'ty
1	Solar Charger w/Power Cord	1
2	Charging Base Adapter	1
3	Alligator Clamp Adapter	1
4	Cigarette Lighter Receptacle Adapter	1
5	Cigarette Lighter Plug Adapter	1

Charging Base not shown.





## PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.